

Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (Withdrawn) A method for identifying a composition to improve the appearance of damaged skin on a patient, comprising topically applying a composition consisting essentially of 1-isobutyl-1H-imidazo [4,5-c] quinolin-4-amine and a dermatologically acceptable carrier or excipient to a section of the skin of the patient; and measuring the changes in skin appearance or biochemical function, wherein the patient is not being treated for viral infection or skin cancer at the same section of the skin.
2. (Withdrawn) The method of claim 1, wherein the composition is applied daily.
3. (Withdrawn) The method of claim 1, wherein the composition is applied one or more times a week.
4. (Withdrawn) The method of claim 1, wherein the composition comprises about 5% of 1-isobutyl-1H-imidazo [4,5-c] quinolin-4-amine.
5. (Withdrawn) The method of claim 1, wherein the composition comprises about 1% to about 2% of 1-isobutyl-1H-imidazo [4,5-c] quinolin-4-amine and is applied daily.
6. (Withdrawn) The method of claim 1, wherein the composition comprises about 1% to about 2% of 1-isobutyl-1H-imidazo [4,5-c] quinolin-4-amine and is applied one or more times a week and less than once a day.
7. (Withdrawn) The method of claim 1, wherein the composition comprises about 1.25% of 1-isobutyl-1H-imidazo [4,5-c] quinolin-4-amine and is applied daily.

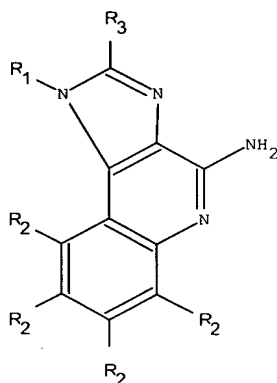
8. (Withdrawn) The method of claim 1, wherein measuring the changes in skin appearance is performed by visual, photographic, or microscopic assessment or inspection of the skin.

9. (Withdrawn) The method of claim 1, wherein the skin is photo-damaged.

10. (Withdrawn) The method of claim 1, wherein the skin contains fine lines or wrinkles characteristic of aged skin.

11. (Currently amended) A method for treating fine lines or clinical wrinkles on a section of aged skin or non-precancerous, normal photodamaged skin, comprising topically applying an effective amount of a composition consisting essentially of ~~4-isobutyl-1-H-imidazo[4,5-c]quinolin-4-amine or a biologically active derivative thereof~~

(a) an imidazoquinoline amine derivative conforming to the structure



wherein

- (i) R₁ is selected from the group consisting of C₁-C₁₀ alkyl; C₁-C₆ hydroxylalkyl; and acyloxyalkyl wherein the acyloxy moiety is C₂-C₄ alkanoyloxy or benzoyloxy, and the alkyl moiety contains one to six carbon atoms or a benzyl, (phenyl)ethyl or phenyl substituent;

(ii) R₂ is hydrogen or no more than two non-hydrogen moieties selected from the group consisting of C₁-C₄ alkyl, C₁-C₄ alkoxy, and halogen with the proviso that non-hydrogen moieties are present then said moieties together contain no more than 6 carbon atoms;

(iii) R₃ is selected from the group consisting of hydrogen, C₁-C₈ alkyl, benzyl, (phenyl)ethyl and phenyl; and

(b) a dermatologically acceptable carrier or excipient to a section of the skin of a patient exhibiting fine lines, clinical wrinkles or non-precancerous, normal photodamage ~~photo-damage~~, wherein the patient is not being treated for viral infection or skin cancer at the same section of the skin

12. The method of claim 11, wherein the composition is applied daily.

13. The method of claim 11, wherein the imidazoquinoline amine derivative is composition consists essentially of about 5% 1-isobutyl-1H-imidazo [4,5,-G] [4,5-c] quinolin-4-amine, said derivative being present at a concentration of about 5% by weight of the total composition.

14. The method of claim 11, wherein the composition is applied one or more times a week.

15. The method of claim 11, wherein the composition consists essentially of about 1% to about 2% of 1-isobutyl-1H-imidazo [4,5,-G] [4,5-c] quinolin-4-amine.

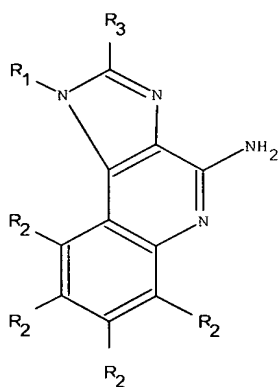
16. The method of claim 11, wherein the composition consists essentially of about 1% to about 2% of 1-isobutyl-1H-imidazo [4,5,-G] [4,5-c] quinolin-4-amine and is applied daily.

17. The method of claim 11, wherein the composition consists essentially of about 1% to about 2% of 1-isobutyl-1H-imidazo [4,5,-G] [4,5-c] quinolin-4-amine and is applied one or more times a week and less than once a day.

18. The method of claim 11, wherein the composition consists essentially of about 1.25% of 1-isobutyl-1H-imidazo [4,5,-G] [4,5-c] quinolin-4-amine and is applied daily.

19. The method of claim 11, wherein measuring the changes in skin appearance is performed by visual, photographic, or microscopic assessment or inspection of the skin.

20. (Currently amended) A method of inducing an immune cytotoxic response in a section of damaged dermal or epidermal tissue of a patient comprising topically applying an effective amount of a cosmetically or dermatologically acceptable composition comprising an immunomodulatory compound capable of attracting macrophage cells to the area surrounding the section of tissue, said immunomodulatory compound conforming to the structure



wherein

(i) R₁ is selected from the group consisting of C₁-C₁₀ alkyl;

C₁-C₆ hydroxylalkyl; and acyloxyalkyl wherein the acyloxy moiety is C₂-C₄ alkanoyloxy or benzoyloxy, and the alkyl moiety contains one to six carbon atoms or a benzyl, (phenyl)ethyl or phenyl substituent;

(ii) R₂ is hydrogen or no more than two non-hydrogen moieties selected from the group consisting of C₁-C₄ alkyl, C₁-C₄ alkoxy, and halogen with the proviso that non-hydrogen moieties are present then said moieties together contain no more than 6 carbon atoms;

(iii) R₃ is selected from the group consisting of hydrogen, C₁-C₈ alkyl, benzyl, (phenyl)ethyl and phenyl;

whereby the section of tissue exhibits improved appearance or physiological properties following the application of the composition after a period of at least 4 weeks.

21. The method of claim 20, wherein the Toll-like receptor 7 is activated by the action of the immunomodulatory compound.

22. (Withdrawn) A method for identifying a composition for improving the physical property of aged or photo-damaged skin, comprising topically applying a composition comprising a Toll-like receptor 7 activator compound to the skin, and measuring the physical or biochemical changes in the skin following treatment for more than 4 weeks.

23. (Withdrawn) The method of claim 22, wherein the composition comprises about 1% to about 2% of 1-isobutyl-1H-imidazo [4,5-c] quinolin-4-amine.

24. (Withdrawn) The method of claim 24, wherein the composition is applied daily.

25. (Withdrawn) The method of claim 22, wherein the composition is a cream.

26. (Withdrawn) The method of claim 22, wherein the measurement of physical change in the skin comprises visual or photographic assessment.

27. A method for identifying a precancerous region of skin, comprising topically applying a composition comprising 1-isobutyl-1H-imidazo [4,5-c] quinolin-4-amine and monitoring the physical appearance of the skin, whereby a precancerous region becomes inflamed or irritated following application of the composition.

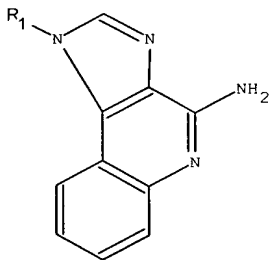
28. The method of claim 27, wherein the composition is applied daily.

29. The method of claim 28, wherein the composition comprises about 1% to about 2% of 1-isobutyl-1H-imidazo [4,5-c] quinolin-4-amine.

30. (New) The method of claim 11, wherein one or both of the R₁ and R₃ substituents on the imidazoquinoline amine derivative is a benzyl, (phenyl)ethyl or phenyl group, and the benzene ring on said group contains one or two moieties independently selected from the group consisting of C₁-C₄ alkyl, C₁-C₄ alkoxy and halogen, with the proviso that if the benzene ring is substituted by two of said moieties, then said moieties together contain no more than six carbon atoms.

31. (New) A method for treating fine lines or clinical wrinkles on a section of aged skin or non-precancerous, normal photodamaged skin, comprising topically applying an effective amount of a composition consisting essentially of

(a) an imidazoquinoline amine derivative conforming to the structure



wherein

R₁ is selected from the group consisting of C₁-C₁₀ alkyl;
C₁-C₆ hydroxylalkyl; and acyloxyalkyl wherein the acyloxy moiety is C₂-C₄
alkanoyloxy or benzoyloxy, and the alkyl moiety contains one to six
carbon atoms or a benzyl, (phenyl)ethyl or phenyl substituent; and

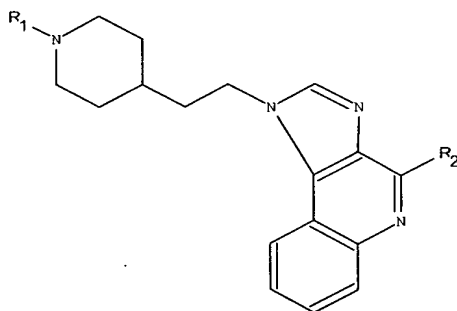
(b) a dermatologically acceptable carrier or excipient

to a section of the skin of a patient exhibiting fine lines, clinical wrinkles or non-
precancerous, normal photodamage photo-damage, wherein the patient is not being
treated for viral infection or skin cancer at the same section of the skin.

32. (New) The method of claim 31, wherein the R₁ substituent on the
imidazoquinoline amine derivative is a benzyl, (phenyl)ethyl or phenyl group, and the
benzene ring on said group contains one or two moieties independently selected from
the group consisting of C₁-C₄ alkyl, C₁-C₄ alkoxy and halogen, with the proviso that if the
benzene ring is substituted by two of said moieties, then said moieties together contain
no more than six carbon atoms.

33. (New) A method for treating fine lines or clinical wrinkles on a section of
aged skin or non-precancerous, normal photodamaged skin, comprising topically
applying an effective amount of a composition consisting essentially of

(a) an imidazoquinoline amine derivative conforming to the structure



wherein

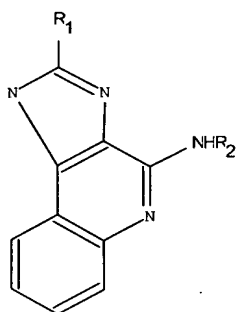
- (i) R_1 is selected from the group consisting of hydrogen, acetyl, n-butyl, or benzyl;
- (ii) R_2 is selected from the group consisting of hydrogen, amine (NH_2), chloride, or phenoxy; and

(b) a dermatologically acceptable carrier or excipient

to a section of the skin of a patient exhibiting fine lines, clinical wrinkles or non-precancerous, normal photodamage photo-damage, wherein the patient is not being treated for viral infection or skin cancer at the same section of the skin.

34. (New) A method for treating fine lines or clinical wrinkles on a section of aged skin or non-precancerous, normal photodamaged skin, comprising topically applying an effective amount of a composition consisting essentially of

- (a) an imidazoquinoline amine derivative conforming to the structure



wherein

- (i) R_1 is selected from the group consisting of hydrogen, phenyl, cyclopentyl, (R)-1-methyl-2-phenylethyl or (S)-1-methyl-2-phenylethyl;
- (ii) R_2 is selected from the group consisting of hydrogen, phenyl, or cyclopentyl; and

(b) a dermatologically acceptable carrier or excipient